

WHAT IS CLAIMED IS:

1. A data processing system management service, comprising:

configuring a data processing system with diagnostic code for generating a trouble ticket containing information characterizing a system problem;

enabling the data processing system to forward the trouble ticket to a remote server;

configuring the remote server to receive the trouble ticket and respond with a return machine authorization number.
2. The service of claim 1, wherein the diagnostic code is executed in response to an event selected from a user requesting the execution due to a suspected system problem and the system detecting a problem.
3. The service of claim 1 wherein the trouble ticket further comprises machine and user identification information and wherein the remote server is further configured to store the trouble ticket information in a service record database.
4. The service of claim 3 further comprising enabling a user of the data processing system to, in response to the receipt of the return machine authorization number, request a service action from service personnel.
5. The service of claim 4 further comprising configuring the service record database to permit service personnel to utilize the trouble ticket information to aid in problem determination and resolution.

6. The service of claim 4 wherein the service action comprises a request selected from a call to a help desk for remote problem determination and repair and a return of the system to the service personnel for repair or replacement.
7. The service of claim 4 further comprising requiring the user to provide the return machine authorization number prior to providing any service action.
8. The service of claim 3, wherein configuring the data processing system with diagnostic code is further characterized as configuring the data processing system with an operational partition and a diagnostic partition capable of executing the diagnostic code.
9. The service of claim 8, further comprising configuring the system to boot the diagnostic partition in response to an event selected from a user requesting the execution of the diagnostic code due to a suspected system problem and the system detecting a problem.
10. The service of claim 9 wherein the diagnostic partition is located on a bootable device operably connected to the system.
11. The service of claim 10 wherein the diagnostic partition is located on a data processing system remotely connected to the system experiencing the problem via a network.
12. The service of claim 8 further comprising enabling a user of the data processing system to, in response to the receipt of the return machine authorization number, request a service action from service personnel.
13. The service of claim 12 further comprising configuring the service record database to permit service personnel to utilize the trouble ticket information to aid in problem determination and repair.

14. The service of claim 12 wherein the service action comprises a request selected from a call to a help desk for remote problem determination and repair and a return of the system to the service personnel for repair or replacement.
15. The service of claim 12 further comprising requiring the user to provide the return machine authorization number prior to providing any service action.
16. The service of claim 1 wherein the trouble ticket is generated and forwarded regardless of whether the system problem requires service; further comprising:
 - configuring the data processing system to generate a return machine authorization request only if the system problem requires service;
 - enabling the data processing system to forward the return machine authorization request to the remote server;and wherein;
 - the remote server responds with a return machine authorization number only upon receipt of a return machine authorization request.
17. The service of claim 4 wherein the trouble ticket is returned to the user at a location other than the data processing system.

18. A computer program product comprising computer executable instructions, stored on a computer readable medium, for managing a data processing system, comprising:

computer code means for performing diagnostic processing responsive to an event selected from a user requesting the diagnostic processing in response to a suspected system problem and the system detecting a problem;

computer code means for generating a trouble ticket identifying the system and characterizing the problem;

computer code means for forwarding the trouble ticket to a remote server;

computer code means operative on the remote server for receiving the trouble ticket, storing the trouble ticket in a database, and responding with a return machine authorization number.

19. The computer program product of claim 18 wherein performing diagnostic processing comprises booting a diagnostic partition of the data processing system containing the diagnostic processing code means.

20. The computer program product of claim 18 wherein the trouble ticket is generated and forwarded regardless of whether the system problem requires service; further comprising:
- computer code means for generating a return machine authorization request only if the system problem requires service;
 - computer code means for forwarding the return machine authorization request to the remote server;
- and wherein;
- the computer code means operative on the remote server responds with a return machine authorization number only upon receipt of a return machine authorization request.
21. A method comprising the steps of:
- executing, in response to an identified problem with a data processing system, a diagnostic routine for generating a trouble ticket containing information characterizing the system problem and identifying the system configuration;
 - forwarding the trouble ticket to a remote server;
 - receiving the trouble ticket at the remote server and storing the trouble ticket information in a database;
 - responding with a return machine authorization number.
22. The method of claim 21, wherein the system problem is identified by one of (i) automatically by the system and (ii) a user.

23. The method of claim 21 further comprising enabling a user of the data processing system to, in response to the receipt of the return machine authorization number, request a service action from service personnel.
24. The method of claim 23 further comprising accessing the database to permit the service personnel to utilize the trouble ticket information to aid in problem determination and resolution.
25. The method of claim 24 wherein the service action comprises a request selected from a call to a help desk for remote problem determination and repair and a return of the system to the service personnel for repair or replacement.
26. The method of claim 24 further comprising requiring the user to provide the return machine authorization number prior to providing any service action.
27. The method of claim 22, wherein the data processing system is configured with at least an operational partition and a diagnostic partition and wherein executing the diagnostic routine comprises booting the system to the diagnostic partition.
28. The method of claim 27 wherein the diagnostic partition is located on a bootable device operably connected to the system.
29. The method of claim 28 wherein the diagnostic partition is located on a data processing system remotely connected to the system experiencing the problem via a network.
30. The method of claim 27 further comprising enabling a user of the data processing system to, in response to the receipt of the return machine authorization number, request a service action from service personnel.

31. The method of claim 30 further comprising accessing the database to permit the service personnel to utilize the trouble ticket information to aid in problem determination and repair.
32. The method of claim 31 wherein the service action comprises a request selected from a call to a help desk for remote problem determination and repair and a return of the system to the service personnel for repair or replacement.
33. The method of claim 32 further comprising requiring the user to provide the return machine authorization number prior to providing any service action.
34. The method of claim 21 wherein the trouble ticket is generated and forwarded regardless of whether the system problem requires service; further comprising:
 - generating a return machine authorization request only if the system problem requires service;
 - forwarding the generated return machine authorization request to the remote server;and wherein;
 - the remote server responds with a return machine authorization number only upon receipt of a return machine authorization request.
35. The method of claim 23 wherein the return machine authorization number is returned to the user at a location other than the data processing system.